ABSTRACT OF THE DISCLOSURE

A rotary vane gas compressor has a cylinder having a generally elliptical inner peripheral surface, a rotor rotatably disposed in the cylinder, vane grooves formed in the rotor and extending inwardly from an outer peripheral surface of the rotor, and vanes slidably disposed in respective ones of the vane grooves and cooperating with the inner peripheral surface of the cylinder and the outer peripheral surface of the rotor to define plural compression chambers for intaking a gas, compressing the gas and discharging compressed gas during rotation of the rotor. A flat groove communicates with bottom portions of the vane grooves during intaking and compression of the gas in the compression chambers, and a high pressure supplying hole communicates with the bottom portions of the vane grooves during end stage compression of the gas in the compression chambers at times when the bottom portions of the vane grooves are not in communication with the flat groove. A communication passage establishes communication between the flat groove and the high pressure supplying hole at the start of operation of the gas compressor to supply high pressure gas to the vane groove bottom portions during start-up to quickly urge the vanes into contact with the inner peripheral surface of the cylinder.